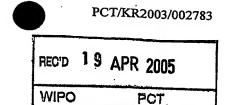
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A.INT COOPERATION TREATY

PCT



INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Artcle 36 and Rule 70)

Applicant's or agent's file reference	T					
03FISP034PC	FOR FURTHER ACTION SeeNotification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)					
International application No.	International filing date(day/month)	lyyear) Priority date (day/month/year)				
PCT/KR2003/002783	19 DECEMBER 2003 (19.1	12.2003) 24 DECEMBER 2002 (24.12.2002)				
International Patent Classification (IPC IPC7 G11B 7/007 Applicant) or national classification and IPC					
LG ELECTRONICS, INC. et	: al					
is a accommend to the applical	xamination report has been prepared at according to Article 36. of3sheets, including	by this International Preliminary Examining Authority g this cover sheet.				
This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).						
These annexes consist of a total	ofsheets.	_				
 This report contains indications r 	elating to the following items:					
I Basis of the report II Priority						
III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV Lack of unity of invention						
citations and explan	ations supporting such statement	novelty, inventive step or industrial applicability;				
VI Certain documents of Certain defects in the	cited ne international application					
VIII Certain observations	VIII Certain observations on the international application					
•						
Date of submission of the demand	Date of co	ompletion of this report				
07 JUNE 2004 (07	.06.2004) 07	7 APRIL 2005 (07.04.2005)				
Name and mailing address of the IPEA/I		ed officer				
Korean Intellectual Property 920 Dunsan-dong, Seo-gu, I Republic of Korea	Daeieon 302 701	NG, Jin Suk				
Facsimile No. 82-42-472-7140	Telephone	e No. 82-42-481-5694				



International aplication No. PCT/KR2003/002783

L	. Bas	is of the report						
1.	1. With regard to the elements of the international application:*							
	\boxtimes	the international application as originally filed						
		the description:						
		pages pages	on anining 11., 61. 1					
		Place	, as originally filed , filed with the demand					
		, filed with the letter of	, and with the defining					
	Ц	the claims: pages						
		nages	, as originally filed					
		r 8						
	_	, filed with the letter of	, med with the demand					
	Ш	the drawings:						
		pagespages	_ , as originally filed					
		pages filed with the letter of						
		the sequence listing part of the description:						
		Dages	00 prints 11 C1 1					
•	•	pages	, as originally filed , filed with the demand					
		filed with the letter of						
2 .	With	n regard to the language, all the elements marked above were available or furnished to this Authonternational application was filed, unless otherwise indicated under this idea.						
	the i	nternational application was filed, unless otherwise indicated under this item.	ority in the language in which					
	Ines	Figure 3 and a support of turnished to this Authority in the following language Figure 5.	sh which is					
	旦	the language of a translation furnished for the purposes of international search (under Pulo 22	1(P))					
	\bowtie	and language of publication of the international application (under Rule 48.3(b))						
		the language of the translation furnished for the purposes of international preliminary examinor 55.3).	ration/undon Dulo- 55 0					
		or 55.5).	amon(under Rules 55.2 and/					
3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international application, the international application, the international application was carried out on the basis of the assurance list.								
		iminary examination was carried out on the basis of the sequence listing: contained in the international application in written form.	are international					
	\exists	filed together with the international and its statement of the control of the con						
í	=	filed together with the international application in computer readable form. furnished subsequently to this Authority in written form.						
i	=	firmished subsequently to this Authority in written form.						
1	=	furnished subsequently to this Authority in computer readable form						
Ĺ		The statement that the subsequently furnished written sequence listing does not go beyon international applicationas as filed has been furnished.	ond the disc losure in the					
[The statement that the information recorded in computer readable form is identical to the wr been furnished.						
	_	been furnished.	itten sequence listing has					
. [一 .	The amendments have an It to						
_		The amendments have resulted in the cancellation of:						
		the description, pages the claims. Nos						
		the drawings, sheets						
		This report has been established as if (some of) the amendments had not been made, since the go beyond the disclosure as filed, as indicated in the Supplemental Poy (Rule 70.26).	ev have been considered to					
		go beyond the disclosure as filed, as indicated in the Supplemental Box(Rule 70.2(c)).**	, occur compared fo					
D.	anl	amount of the same						
in	Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed." and are not annexed to this report since they do not not a supplementation.							
ar	id 70.	opinion as "originally filed." and are not annexed to this report since they do not contain and 17).	nendments (Rules 70.16					
· Al	ту гер	placement sheet containing such amendments must be referred to under item I and annexed to the	is report					
		- Indicate of the						



International aplication No.
PCT/KR2003/002783

V. Keasoned statement under Article 35(2)	with record 4
citations and explanations support	with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting su	ch statement 22 22 23 25 25 25 25 25 25 25 25 25 25 25 25 25

- 1				
	1. Statement	•	-	
l	Novelty (N)	Claims	1-26	
I		Claims	none	<u>_Y</u> ES
ı				NO
ı	Inventive step (IS)	Claims	1-26	
l		Claims	none	YES
ı	Industrial applicability (IA)	O1 ·	1.26	NO
ĺ	moustrat applicability (IA)	Claims		YES
I		Claims	none	NO
Ł				

2. Citations and explanations (Rule 70.7)

Reference is made to the following documents;

D1=US 6128630 A(INTERNATIONAL BUSINESS MACHINES CORPORATION) 3 OCT. 2000
D2= US 5404485 A(M-SYSTEMS FLASH DISK PIONEERS LTD.)4 APRIL 1995
D3=US 5832522 A(KODAK LIMITED) 3 NOV. 1998
D4=US 5301288 A (M-SYSTEMSFLASH DISK PIONEER LTD.) 4 APR. 1995

1. Novelty and an Inventive step

Claims 1-26 meet the criteria set out in PCT Article 33(2) and 33(3).

The subject matter of the claim 1 in the present invention relates to a dual journaling storing method and storage medium thereof. The dual journaling method is used to store, manage, and process the data, using the flash memory as a recording medium in the present invention. The dual journaling method is a storing method from the first position and storing method from the end position, for the middle position respectively.

But none of the above mentioned prior arts shows the dual journaling method mentioned in the present invention. Therefore novelty and an inventive step can be acknowledged for the subject matter of claim 1. Claims 4, 5, 6, 9, 10, 15, 20, 25, 26 are about the dual journaling storing methods as the claim 1. Therefore, claims 1, 4, 5, 6, 9, 10, 15, 20, 25, 26 are novel and inventive. As the independent claims are novel and inventive, all the remaining claims 2, 3, 7, 8, 11, 14, 16–19, 21–24 are novel and inventive, too.

2. Industrial Applicability claims 1-26 meet the criteria set out in PCT Article 33(4).